



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,844	05/29/2001	Stein A. Lundby	QCPA614D1	8064

23696 7590 11/16/2006
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/867,844

Applicant(s)

LUNDBY ET AL

Examiner

Andrew C. Lee

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Based upon Applicant's amendment filed on 8/31/2006, Claims 9 and 10 are cancelled without prejudice and new claims 11, 12, 13 have been added.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keashly et al. (U.S. Patent No. 6330289 B1) in view of Ziv et al. (5703902).

Regarding claims 11, 13, Keashly et al. disclose the limitation of a method, an apparatus of limiting peak transmit power from a transmitter in a wireless communication system (Fig. 1, column 3, lines 45 – 54, recited cellular system as a wireless communication system, each channel element as transmitter, column 4, lines 64 – 65, limiting peak transmit power), comprising: selecting a time offset for said waveform by determining which of a possible set of offsets is being used by a lowest number of waveforms in said plurality of waveform (Fig. 2, right hand column;; recited "time offset (element 125) added to signal (element 120) in order to introduce a relative delay between symbol transition (element 112) of signal (element 110) and the symbol transition (element 112) of signal (element 12)" as

Art Unit: 2616

selecting a time offset for said waveform by determining which of a possible set of offsets is being used; column 4, lines 32 – 56, column 5, lines 1 – 4); delaying each of the plurality of waveform in accordance with said individual time offset (recited “time offset 125 added to signal 120; another offset 135 added to signal 130” as delaying each of the plurality of waveform in accordance with said individual time offset; Fig. 2, column 4, lines 35 – 51; recited passed through a delay stage wherein a relative offset is added; Fig. 5, column 5, lines 45 – 67); combining said delayed waveform to said plurality of waveforms to form said signal for transmission from said transmitter to provide a minimum increase in the peak transmit power in one transmission time frame (Fig. 3, right hand column, column 4, lines 52 – 65, recited “the addition of time offsets 125 and 135 reduce the peak power requirement” as to provide a minimum increase in the peak transmit power in one transmission time frame). Keashly et al. do not disclose explicitly when a new waveform is being added to a plurality of waveforms in the signal. Ziv et al. disclose the limitation of when a new waveform is being added to a plurality of waveforms in the signal (recited “assigned a new signal, each new signal occupies a unique time offset; column 15, lines 11 – 21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Keashly et al. to include when a new waveform is being added to a plurality of waveforms in the signal such as that taught by Ziv et al. in order to provide data being grouped in symbols called power control groups. The power control groups are transmitted at various positions within a data frame utilizing a pseudo-random distribution method as suggested by Ziv et al. (see column 2, lines 46 – 49).

Art Unit: 2616

Regarding claim 12, Keashly et al. disclose the limitation of the method as recited in claim 11 further comprising: transmitting said signal after said combining (recited "combining the output signals for each said plurality of channels prior to amplification", column 9, lines 13 – 15, and "adding said offset to each bit stream signal prior to modulation", column 8, lines 18 – 19; wherein the amplification and modulation imply transmitting said signal).

Response to Arguments

4. Applicant's arguments filed on 8/31/2006 with respect to claims 11, 12, 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

Art Unit: 2616

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACL

Nov 09, 2006


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER